

SALT MANAGEMENT STRATEGY: SALT TRACKING AND REPORTING WORKGROUP

ESTABLISHING A BASELINE AND ENCOURAGING ACCOUNTABILITY

Salt tracking and reporting are essential to accurately document current winter maintenance operations and assess progress in implementing the Salt Management Strategy (SaMS) over time. As one presenter at the Stakeholder Advisory Committee training said in May 2018, “You can’t manage what you don’t measure.” In addition to the use of salt, tracking and reporting, BMP implementation also warrants discussion by this workgroup. Ultimately, effective tracking and reporting can promote accountability and support broad and appropriate SaMS implementation. Potential discussion topics for the workgroup that will address these critical SaMS elements are provided below. The examples are not exhaustive nor prioritized, but are meant to facilitate workgroup discussions.

Challenges for this workgroup may include 1) promoting consistency and comparability while allowing for needed flexibility; 2) integrating inherent public and private sector differences; and 3) identifying attractive incentives and/or ways of leveraging resources to achieve tracking and reporting goals.



BMP Implementation

Reporting

- Document BMPs currently in use
- Track BMP adoption over time
- Consider public and private sector contexts

Tracking

- Evaluate how well level of service goals are achieved as practices are adopted to reduce salt use
- Develop methods to avoid over-delivering on level of service decisions
- Capture positive and negative BMP experiences

Salt Use

Reporting

- Recommend appropriate timing: Real-time, regularly, periodically
- Consider different audiences, public and private sector
- Relate to SaMS performance measures
- Standardized for comparability
- Minimize cumbersome requirements, focus on most important data
- Develop key baseline data (e.g. per storm/per season use, annual trends)

Tracking

- Identify what is already being tracked
- Consider what records winter service providers could keep with minimal change
- Identify what to track
 - Personnel, equipment, and material usage
 - Weather and pavement conditions
 - Storm characteristics to normalize salt use across storms
- Determine the most appropriate metrics
 - For roads: quantity of salt per lane mile, or per event (inch/pass)
 - For private property, non-road context: acres, sidewalk length, etc.
- Identify suitable tools for the job
 - Sensors (roadside, in-road, vehicle-based, drones)
 - GPS for tracking location of trucks
 - Equipment on trucks to track application rates, tractions, location, and time
- Evaluate incentives
- Integrate special tracking needs for public and private applications

The information in this flier was compiled from existing materials in the sources listed below.

References:

1. Clonch, D. 2018. Alternative Chemical Products and Treatments. Presentation to: Stakeholder Advisory Committee, Northern Virginia Salt Management Strategy, May 24, 2018, Lorton, Va.
2. Minnesota Pollution Control Agency (MPCA). 2016. Twin Cities Metropolitan Area Chloride Management Plan. <https://www.pca.state.mn.us/sites/default/files/wq-iw11-06ff.pdf>, accessed 7/16/2018.
3. Nixon, W. 2018. Excellent Practices in Winter Maintenance Operations. Salt Institute. Presentation to: Stakeholder Advisory Committee, Northern Virginia Salt Management Strategy, May 24, 2018, Lorton, Va. https://www.deq.virginia.gov/Portals/0/DEQ/Water/TMDL/SaMS/MeetingMaterials/TechnicalTraining/VA_SaMS_Talk_May_2018.pdf, accessed 9/20/2018.
4. Sexton, Phill. 2018. Sustainable Winter Management (SWiM™). Presentation to: Stakeholder Advisory Committee, Northern Virginia Salt Management Strategy, May 24, 2018, Lorton, Va. https://www.deq.virginia.gov/Portals/0/DEQ/Water/TMDL/SaMS/MeetingMaterials/TechnicalTraining/SaMS_IP_PhillS_SWiM_Presentation_20180522.pdf, accessed 9/20/2018.
5. University of Iowa. 2015. Clear Roads – Manual of Best Management Practices for Road Salt in Winter Maintenance. 48p. http://clearroads.org/wp-content/uploads/dlm_uploads/0537_2015-Clear-Roads-Best-Practice-Guide-WEB.pdf, accessed 7/16/2018.